REMARKS

This responds to the Office Action dated on July 19, 2006. Claims 1, 2 and 4-6 are amended. No are cancelled or added. As a result, claims 1-16 remain pending in this patent application.

Information Disclosure Statement

Applicant submitted a Supplemental Information Disclosure Statement and a 1449 Form on March 23, 2006. Applicant respectfully requests return of an initialed copy of the 1449 Form to Applicant's Representatives to indicate that the Examiner has considered these references.

§103 Rejection of the Claims

I. Claims 1-2, 6, 8-9, 13-14 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beattie et al. (U.S. Patent No. 5,659,742, thereafter "Beattie") in view of Lim (U.S. Patent No. 6,526,521, thereafter "Lim").

Concerning claims 1-2, 6, 8-9, 13-14 and 16:

Applicant respectfully submits that no *prima facie* case of obviousness presently exists for at least three reasons: (1) the cited portions Beattie and Lim fail to disclose, teach, or even suggest, all elements of claims 1-2, 6, 8-9, 13-14, and 16; (2) Lim discloses data storage hardware technology, which is completely non-analogous art to the present knowledge management systems for delivering content; and (3) a person of ordinary skill in the knowledge management art would not possess the knowledge or skills to combine Beattie and Lim.

(1) First, Beattie apparently discloses storage and retrieval of multi-media information, including ranking the relevance of the returned information. Beattie notes "[t]he relevance of the selected information is determined according to matches between the query and the information." (column 6, lines 62-64) The Office Action attempts to equate Beattie's information returned with high relevance to the query with the claimed "successful service interaction." However, the mere calculation of a document's relevance to a query—even if expressed as a percentage—is not necessarily the same as determining whether a service interaction was successful from the user's perspective. As an illustrative example, a query could

return many documents—some even with a relevance score of 100 (to use the terminology provided by Beattie). Still, the user may not be able to find a document that satisfies his or her query. Such a query would reasonably be classified as a non-successful service interaction (NSI). Unlike Beattie, under such circumstances, the present system may still identify (flag) a content hole. Moreover, the present patent application provides several examples of how a SSI can be determined without relevance scoring:

> In one example, an SSI is a measure of whether a user read a small number of documents and then terminated the session with the content provider, thereby inferring that the content provider was successful at efficiently servicing the user's needs. In another example, SSI is determined by comparing the user's clickstream, using regression or any other suitable technique, to clickstream pattern(s) deemed to be represent successful user/provider interaction sessions.

(Application at paragraph 32). Thus, Applicant submits that it is improper to equate a mere high relevance score of a returned document to the query as constituting a successful service interaction.

Furthermore, Applicant cannot find in the cited portions of Beattie any disclosure, teaching, or suggestion relating to "concept nodes" to which content is selectively pre-tagged before receiving a user query as part of a service interaction. The Office Action apparently attempts to equate the claimed "concept nodes" to Beattie's "query." Applicant respectfully submits that such a construction is logically incorrect. In the present application, "concept nodes" are abstract groups related to a particular taxonomy or knowledge map (*see* Application at paragraphs 48-49). Within an example hierarchical taxonomy (i.e. Motorized Vehicles) concept nodes might include very general nodes (i.e. Automobile, Motorcycle, Train, etc...) drilling down to the more specific (i.e. SUVs, Sedans, etc...) as you progress through the taxonomy (*see* Application at Fig. 3). Content in the knowledge repository is "tagged" to one or more such concept nodes. If the repository lacks content tagged to a particular concept node, that node may be "flagged" as having a "content hole," such as by determining whether a SSI exists "as a function of concept nodes." In contrast, the "query" disclosed by Beattie, represents the parsing of a natural language search string into key words to be used within the information retrieval method (*see* Beattie at col. 23, lines 9-64). Therefore, the "query" disclosed by Beattie is a transitory entity which cannot logically be flagged for a content hole.

Because the cited portions of Beattie and/or Lim fail to disclose, teach, or suggest all elements of claims 1-2, 6, 8-9, 13-14, and 16, Applicant respectfully requests reversal of this rejection as lacking a *prima facie* case of obviousness.

(2) Second, Lim is completely non-analogous art. Analogous art must either be in the field of technology of the claimed invention or, if outside that field of technology, it must deal with the same problem solved by the claimed invention. *See In re Wood*, 599 F.2d 1032, 202 USPQ 171 (CCPA 1979). Lim relates to providing access to data storage pathways that connect a cluster of hardware (physical) nodes to a data storage system. Lim discloses a technique for failover operations to occur in a clustered environment when data pathway degradation reaches a pre-determined percentage of full connectivity. (*see* Lim col. 2, lines 51-65, Lim col. 9, lines 17-21, and the data storage pathway availability threshold 60, Fig 2). Lim's monitoring of "percentage" is solely related to the hardware connectivity in the form of data storage pathways used for transferring data to and from physical network storage devices.

In contrast, the present claims 1-2, 6, 8-9, 13-14, and 16 recite a method for detecting content holes within a taxonomy or knowledge map of abstracted concept nodes to which content is tagged. These claims are focused on the quality of content from an end-user perspective, while Lim is only focused on the quality of the hardware connectivity to a repository (data storage). Lim cannot reasonably be viewed as analogous art because it is focused on providing optimal hardware access to physical data storage devices, without regard to—or even knowledge of—the content stored on such data storage devices. By contrast, the present patent application is directed toward the quality of the actual content, regardless of how or where such data is physically stored. Applicant respectfully requests withdrawal of this rejection insofar as it is based upon the non-analogous Lim reference.

(3) Third, the ordinary knowledge management artisan would be left unable to combine Lim and Beattie. As the Court of Appeals for the Federal Circuit has recently reiterated, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him capable of combining the prior art references. *See Dystar Textilfarben GmbH v. C.H. Patrick Co.*, No. 06-1088 at 21 (Fed. Cir. October 3, 2006).

The ordinary artisan practicing the present patent application would, at best, be schooled in Knowledge Management, Content Management, and perhaps Software Development. But

Lim's focus is hardware connectivity to data storage devices, which requires detailed knowledge of data networking and routing technologies. Applicant respectfully submits that even the most knowledgeable software developer working in the knowledge or content management fields would be unlikely to even be aware of Lim, much less to have the knowledge to combine Lim and Beattie in any meaningful manner. Further, as discussed above, the combination still fails to yield the claimed invention, since the combination fails to disclose, teach, or suggest determining a percentage of successful service interactions as a function of concept nodes, into which a concept body is organized, and to which content is pre-tagged even before receiving a user query as part of a service interaction. Thus, Applicant respectfully requests withdrawal of this rejection of these claims.

II. Claims 3-5, 7, 10-12 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beattie et al. (U.S. Patent No. 6,643,640) in view of Lim (U.S. Patent No. 6,526,521) in view of Arai (U.S. Patent No. 6,714,920, thereafter "Arai").

Applicant respectfully submits that no *prima facie* case of obviousness presently exists because the cited portions of Beattie, Lim, and/or Arai, fail to disclose, teach, or suggest, all elements of claims 3-5, 7, 10-12 and 15, for the reasons discussed above with respect to the lack of a "percentage" of "successful service interactions" determined "as a function of concept nodes" within Beattie and/or Lim. As noted above, Beattie's relevance scores cannot be equated to a successful service interaction, Beattie fails to disclose concept nodes to which content is pre-tagged, and Lim's pre-defined percentage of data storage pathways do not teach or suggest the percentage of successful service interactions determined as a function of concept node as claimed within the present patent application.

Furthermore, Applicant cannot find in the cited portions of Beattie, Lim and/or Arai any disclosure, teaching, or suggestion of "billing as a function of the difference between the percentage of successful service interactions in the first information retrieval system and the percentage of successful service interactions for services provided in the second information retrieval system" as presently recited in claim 3 and similarly recited in claims 5 and 7. Instead, Arai apparently discloses a system of billing that bills a user for content that they access, and reduces the billing amount by a discount. This discount is based on the value of any advertising

received by the user in conjunction with the accessed content. (*See* Arai at Abstract). However, Applicant cannot find any discussion of a successful service interaction in Arai, much less any disclosure, teaching, or suggestion of billing as a function of the percentage of successful service interactions. Therefore, the combination of Beattie, Lim, and/or Arai fail to disclose, teach, or even suggest all elements recited or incorporated in the present claims. Because no *prima facie* case of obviousness exists with respect to these claims, Applicant respectfully requests withdrawal of this rejection. For brevity, Applicant defers (but reserves the right to present) further remarks, such as concerning any dependent claims, which are believed separately patentable.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6951 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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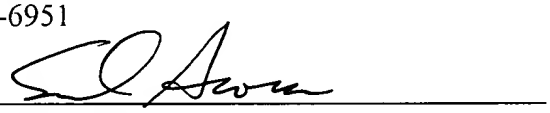
Date October 19, 2006

By 
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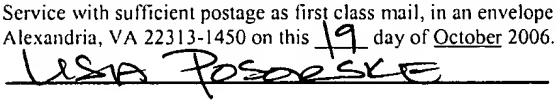

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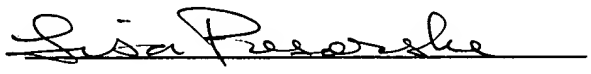

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